

Highlights

Overview

This issue of the *Natural Gas Monthly* presents the most recent estimates of natural gas data from the Energy Information Administration (EIA). Estimates extend through July 1998 for many data series and through April for most price series. This issue also includes a special report, "Revisions to Monthly Natural Gas Data." The report discusses the differences between the initial (first) estimates of monthly supply and disposition data published for 1994, 1995, and 1996 and the final monthly data published for those years. EIA provides this information to assist users in evaluating the usefulness of preliminary data.

Highlights of the July 1998 data contained in this issue are:

- The deliveries to industrial consumers have been revised upward for January, February, and March 1998 and downward for April. With these revisions, they total 4,987 billion cubic feet from January through July 1998, still less than the year-ago level, by 3 percent.
- Net injections into underground storage continued at a rapid rate as the 1998 refill season (April through October) passed its mid-point. Working gas in storage at the end of July was 2,495 billion cubic feet, 24 percent higher than at the end of July 1997.
- Thus far in 1998, monthly estimates of natural gas production are 1 percent higher than 1997 levels and estimates of net imports are 4 percent higher.
- Cumulatively for January through July 1998, natural gas consumption declined in the residential, commercial, and industrial end-use sectors compared with a year ago. Total end-use consumption is estimated to be 12,888 billion cubic feet, 3 percent lower than for the same period of 1997. The drop in residential and commercial consumption can be attributed in part to the warmer-than-normal temperatures during the 1997-98 heating season (November through March), resulting in less demand for gas for space heating.

Cumulatively from January through April 1998, all natural gas prices dropped compared with levels for the same time period in 1997. The decrease in prices reflects the lower demand for gas during the past heating season. However, the wellhead price rose in March and April, after declining during the previous 3 months.

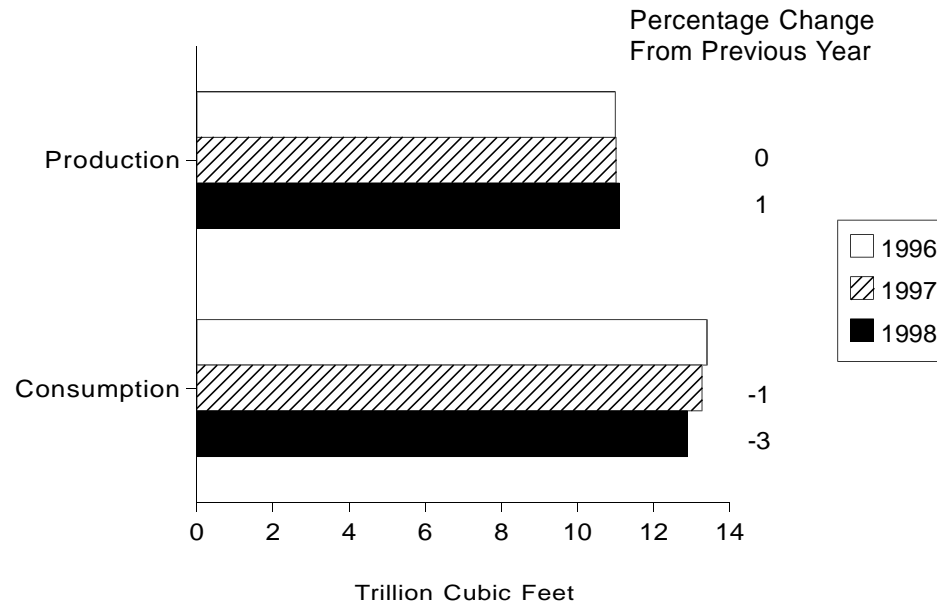
Supply

Estimates of natural gas production and net imports through July 1998 indicate a slight increase in supply compared with year-ago levels. Dry gas production in July 1998 was estimated to be 1,611 billion cubic feet or 52.0 billion cubic feet per day (Table 1). This level is 4 percent higher than the previous month's estimate, but only 1 percent higher than in July 1997. Cumulatively from January through July, dry production rose 1 percent from 1997 to 1998 (Figure HI1).

Net imports, which make a significant contribution to the supply of natural gas in the United States, are estimated to be 238 billion cubic feet in July 1998 or 7.7 billion cubic feet per day (Table 2). The monthly estimates of net imports in 1998 have exceeded those of 1997 in every month. Cumulatively for January through July, net imports are 4 percent higher than they were 1 year ago.

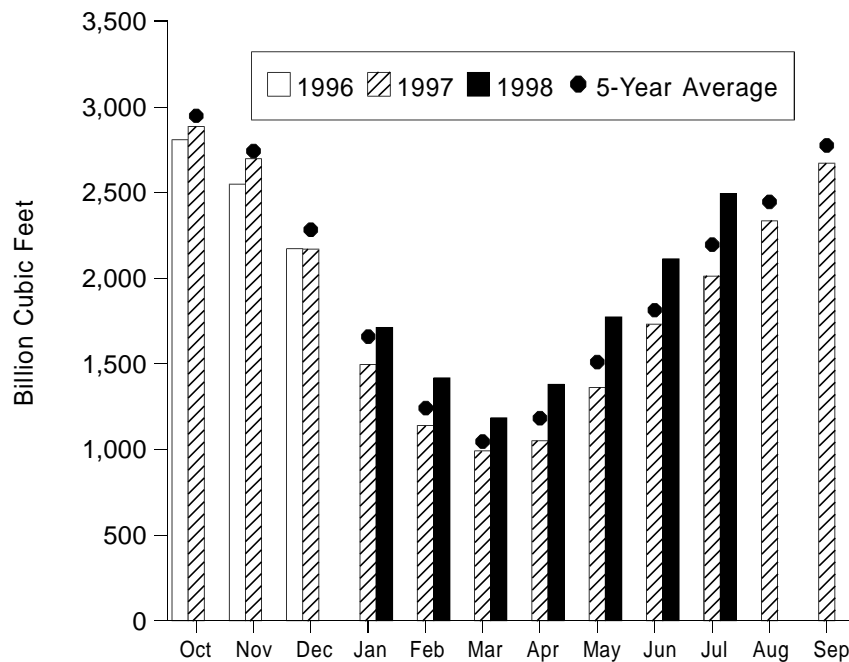
Injections into underground storage continued at a strong rate as the 1998 refill season passed its mid-point. Working gas in underground storage had ended the 1997-98 heating season (November through March) at 1,184 billion cubic feet, 19 percent more than at the end of the previous heating season. Despite this higher working gas level, so far this refill season an estimated 1,313 billion cubic feet of gas has been added to underground storage, 28 percent more than during the same months last year. Working gas in storage at the end of July 1998 is estimated to be 2,495 billion cubic feet, 24 percent more than at the end of July 1997. (Figure HI2).

Figure HI1. Natural Gas Production and Consumption, January-July, 1996-1998



Source: Table 2.

Figure HI2. Working Gas in Underground Storage in the United States, 1996-1998



Note: The 5-year average is calculated using the latest available monthly data. For example, the December average is calculated from December storage levels for 1993 to 1997 while the January average is calculated from January levels for 1994 to 1998. Data are reported as of the end of the month, thus October data represent the beginning of the heating season.

Sources: Form EIA-191, "Underground Natural Gas Storage Report," Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," and Short-Term Integrated Forecasting System.

End-Use Consumption

The deliveries of natural gas to industrial consumers have been revised upward for January, February, and March 1998. The total for these 3 months is now 2,275 billion cubic feet, 3 percent higher than the total published in the June issue of the *Natural Gas Monthly*. These revisions are the result of corrections to misreported data. Reports to EIA surveys may contain errors because of changes at companies such as mergers, acquisitions, and corporate reorganizations. Sometimes the data are not reported correctly until errors and appropriate corrections are identified through EIA quality assurance procedures. EIA will continue to investigate the reporting of industrial data in 1998 as part of its ongoing program of quality assurance.

The April 1998 natural gas deliveries to industrials have been reported on an EIA survey at 694 billion cubic feet, 2 percent less than the 705 billion cubic feet estimated for April from the Short-Term Integrated Forecasting System (STIFS) model as published last month. In this, the July issue of the *Natural Gas Monthly*, deliveries to industrials in 1998 are reported from an EIA survey for January through April and estimated from the STIFS model for May through July. Cumulatively for January through July 1998, they total 4,987 billion cubic feet, still less than the year-ago level, by 3 percent.

During July 1998, natural gas consumption by end users is estimated to be 1,389 billion cubic feet, 5 percent more than in June (Table 3). End-use consumption for the first 7 months of the year is estimated to be 11,751 billion cubic feet, 3 percent lower than for the same period of 1997. Cumulative decreases in the residential, commercial, and industrial sectors contributed to the overall decrease in consumption. Residential sector consumption was 237 billion cubic feet lower than during the first 7 months of 1997. Estimated consumption in the commercial and industrial sectors was 117 and 155 billion cubic feet lower, respectively, than during the first 7 months of 1997 (Figure HI3).

For the month of July, consumption estimates in the residential and commercial sectors totaled 282 billion cubic feet. This estimate is equal to consumption levels reported in July 1997.

Estimates of natural gas consumption by electric utilities are available through April 1998. Electric utilities con-

sumed an estimated 190 billion cubic feet in April 1998, 2 percent less than in March. Cumulatively from January through April, electric utility consumption was 689 billion cubic feet, more than 3 percent higher than during the same period of 1997. Electric utility consumption is typically at its lowest during the winter months when the demand for natural gas for space heating is at its highest. Data for 1998 that might show demand increases resulting from summer air-conditioning requirements are not yet available.

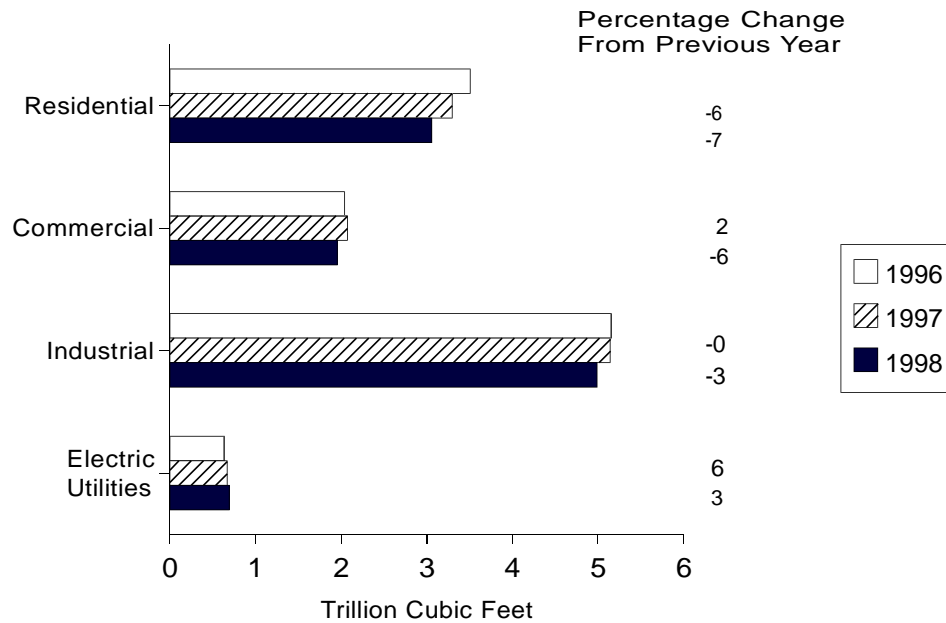
Prices

The average natural gas wellhead price in April 1998 is estimated to be \$2.05 per thousand cubic feet, 10 percent higher than the price in March and 25 percent higher than in April 1997 (Table 4). This is the second consecutive month that the price has increased, after declining in December 1997 and January and February of this year. The rise in the wellhead price was primarily due to weather forecasts calling for warmer-than-normal temperatures which could result in a greater demand for gas by electric utilities as they need to meet increased loads for air-conditioning.

The estimated price paid for natural gas in the residential sector increased by 8 percent between March and April to \$6.73 per thousand cubic feet. This is the first increase in residential prices since August 1997 when the price peaked at \$8.82 per thousand cubic feet. Cumulatively from January through April 1998, the price averaged \$6.43 per thousand cubic feet, 4 percent less than during the same period in 1997 (Figure HI4). The price for deliveries to commercial consumers also increased between March and April, by 3 percent.

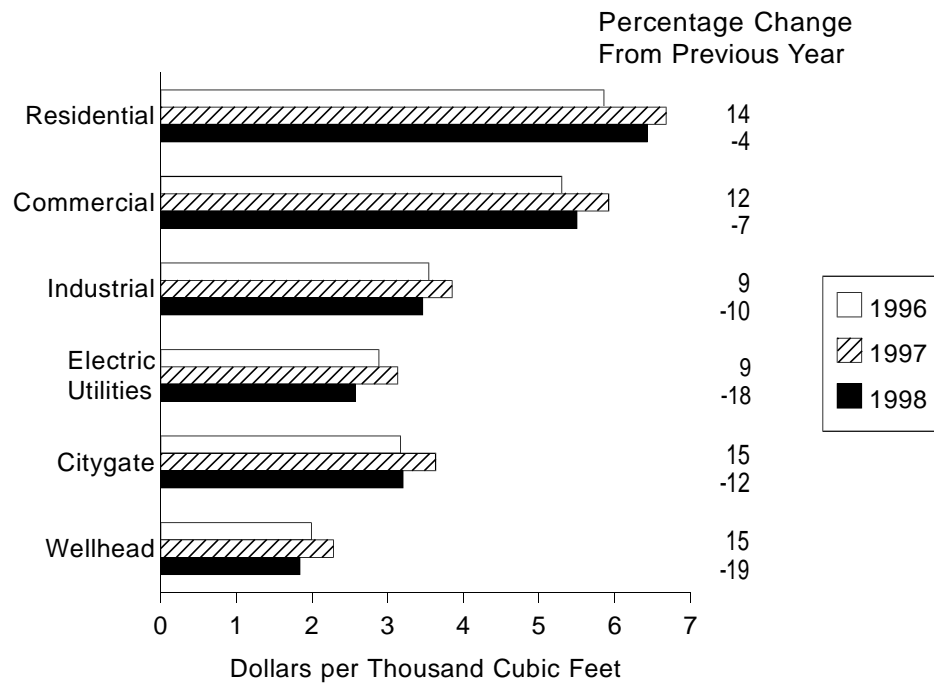
In the industrial and electric utility sectors, prices are usually more sensitive to increases in wellhead prices, but April data indicate that the industrial price declined by \$0.19 per thousand cubic feet or almost 6 percent. This may be the result of more long-term purchases by industrial consumers or the marketers that supply them. Cumulatively from January through April, the industrial price was 10 percent below the level for the same period in 1997. The electric utility prices are available through March 1998 in this report. Cumulatively from January through March, estimated prices in the electric utility sector are 18 percent lower in 1998 than in 1997—\$3.13 versus \$2.57 per thousand cubic feet.

Figure HI3. Natural Gas Delivered to Consumers, January-July, 1996-1998



Note: The reporting of electric utility deliveries is 3 months behind the reporting of other deliveries.
Source: Table 3.

Figure HI4. Average Delivered and Wellhead Natural Gas Prices, January-April 1996-1998

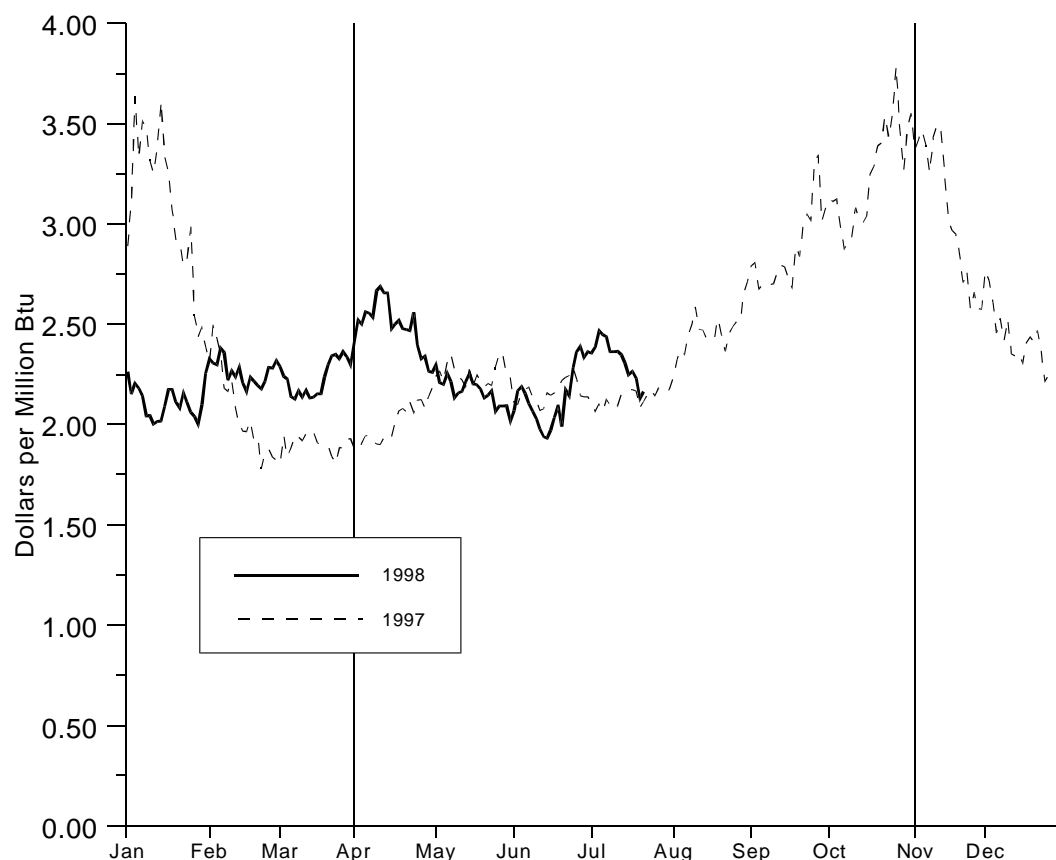


Note: Commercial and industrial average prices reflect onsystem sales only. The reporting of electric utility prices is 1 month behind the reporting of other prices..
Source: Table 4.

The July futures contract at the Henry Hub expired on June 26 at \$2.358 per MMBtu—more than 20 cents higher than last year's price (\$2.145). The August contract price was generally stable during early July at about \$2.35 per MMBtu before beginning a downward trend in the second week of the month (Figure HI5). At the close of

trading on July 23, the contract settled at \$1.934 per MMBtu. Even with the hot weather in the Southwest during June and July, most market observers believe that the overall demand for gas is generally moderate at this time. The moderate demand combined with the elevated level of gas in storage is contributing to a softening in the price of gas.

Figure HI5. Daily Futures Settlement Prices at the Henry Hub



Note: The futures price is for the nearby month contract, that is, for the next contract to terminate trading. Contracts are traded on the New York Mercantile Exchange. April 1 is the beginning of the natural gas storage refill season. November 1 is the beginning of the heating season.

Source: Commodity Futures Trading Commission, Division of Economic Analysis.